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Oscillation fields of a generator of microwave waves. p. 40

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17-26 '62. (MIRA 16:3)  
(Belogorskiy region (East Kazakhstan Province)—Strip mining)

Veterinary Medicine

BULGARIA

CHENCHEV, Prof. Iv., VI2PB; NEDYALKOV, Dr. St., VII; KHRISTOV, Dr. Y., VII;  
DUMANOV, Dr. Y., VIZPB; BODUROVA, Dr. Tsv., VII; SAVOV, Dr. At., IBPRNB

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Sofia, Veterinarna Sbirka, Vol 63, No 8, 1966, pp 7-9

Abstract: Preparations Biozan T and Biozan P to be administered to newborn calves and pigs, respectively, for the prevention of intestinal and other diseases have been developed. Biozan T contains gamma-globulins active against *S. enteritidis*, *S. typhi murium*, *P. bulbsepticus*, *E. coli* (O<sub>9</sub>, O<sub>78</sub>, and O<sub>117</sub>), and the virus of Aujeszky's disease and Biozan P gamma-globulins active against *S. cholerae suis*, *S. typhi murium*, *E. coli* (hemolytic and non-hemolytic), and the virus of Aujeszky's disease. Furthermore, vitamin C, terranycin, bionycin, and penicillin have been added to both preparations. Tests carried out on Biozan T indicated that it was non-toxic to white mice, had a bacteriostatic effect on *Staph. aureus* 209 and *E. coli* O<sub>9</sub>, and did not deteriorate with respect to antibiotic activity on being stored at 4° for 5 months. On being administered to calves 3-16 days old, Biozan T was very effective in stimulating growth. While the calves did not develop diarrhea, a definite conclusion in regard to the effect of Biozan T in producing immunity is not yet possible at this stage. Table, no references.

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Academy of Sciences, Prague. 2. Present address: Institute  
"Galenika", Zemun, Yugoslavia (for Dumanovic). Submitted  
October 24, 1963.

YUGOSLAVIA/Form Animals. Domestic Fowls

Q-5

Abstr Jour : Ref Zhur - Biol., No 8, 1958, No 55738

Author : Rakov A.; Dumanovsky P., Findrik M.

Inst : Not Given

Title : The Requirement of Vitamins A and D<sub>3</sub> and Their Influence on the Growth of Chicks (Fotrobnost' vitaminakh A i D<sub>3</sub> ikh vliyaniyu na rast teplyyet)

Orig Pub : Veterin. zhurn., 1957, 27, No 3-4, 112-120

Abstract : In order to study the influence of vitamins A and D<sub>3</sub> on the growth of chicks, and their requirements, two experiments with Rhode Island chicks were carried out in the spring and fall. In each experiment lasting 40 days, there were 3 groups of chicks. In both experiments, the basic ration was identical and was composed of corn (50%), barley meal (25%), soybean seed meal (10%), oatmeal (5%), meat meal (5%), Vitozen (2%), and brewer's yeast (2%). The control group was given only the basic ration. The second group in the first experiment was given additionally 5,555 I.U. of vitamin A

Card : 1/2

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KRALJ, M; PETROVIC, D; CVETNIC, S; DUKHOVSKY, F.

Institute of Contagious and Infectious Diseases of the  
Veterinarian Faculty of the University (Institut za  
zarazne i invazione bolesti Veterinarskog fakulteta  
Sveucilista), Zagreb (for all)

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RAKO, A; DUMANOVSKY, F; FINDREK, M; JAKOVAC, N.

Institute of Zootechnics and Hygiene of the Veterinarian  
Faculty of the University (Institut za zootehniku i  
higijenu Veterinarskog fakulteta Sveucilista), Zagreb  
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Z. Przybylkiewics. Adres autorat Krakow, Kopernika 17, Klinika Chor.  
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(TETANUS, metab.

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(METABOLISM, TISSUE,

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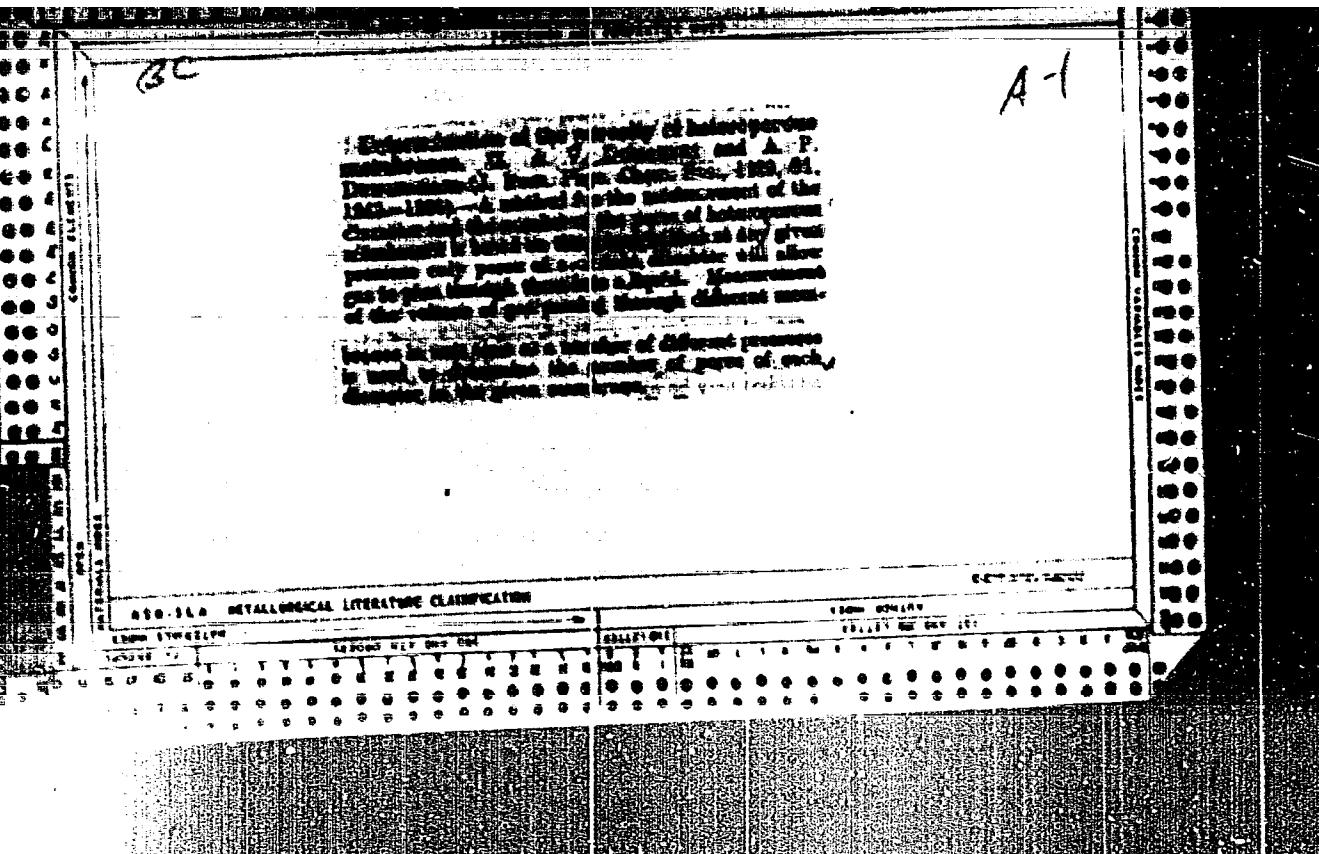
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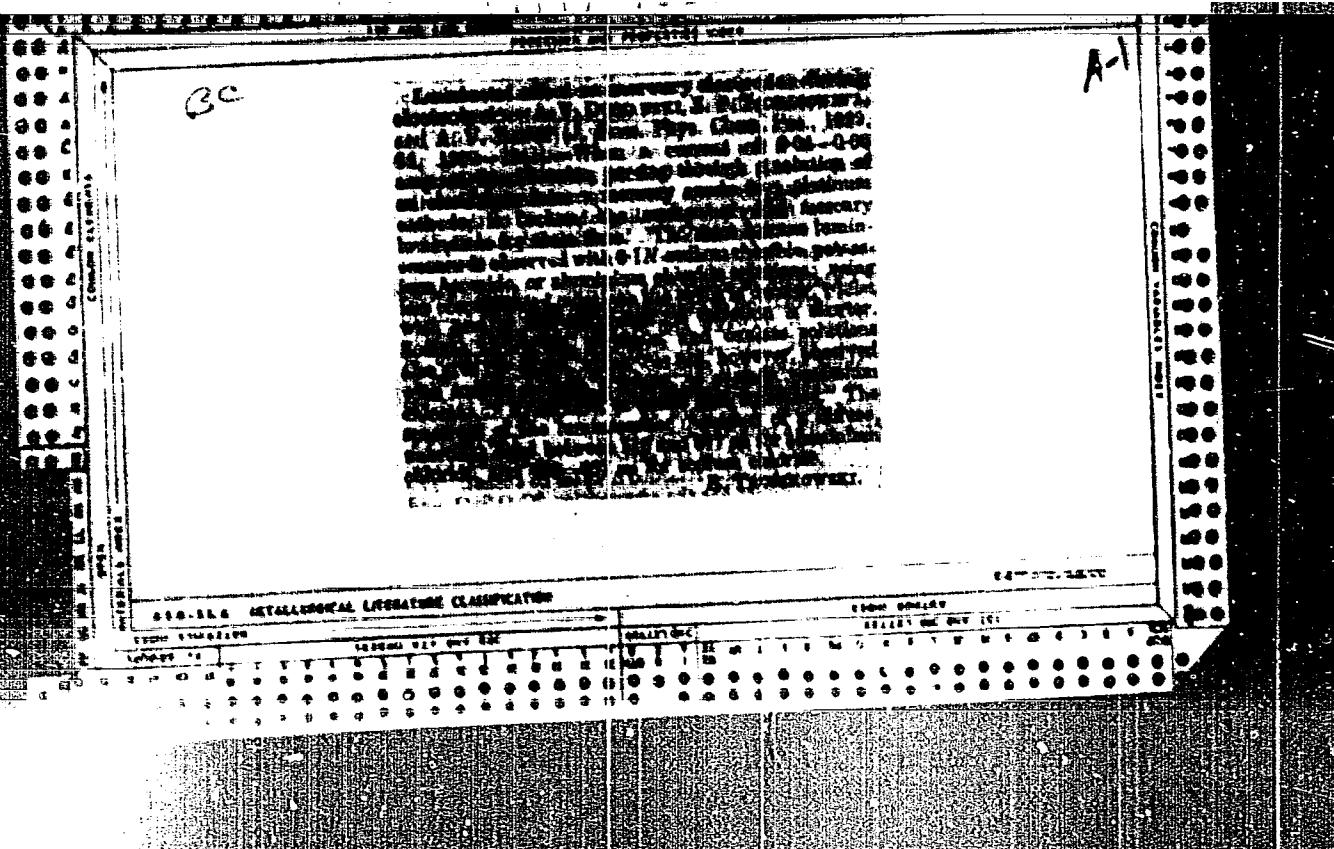
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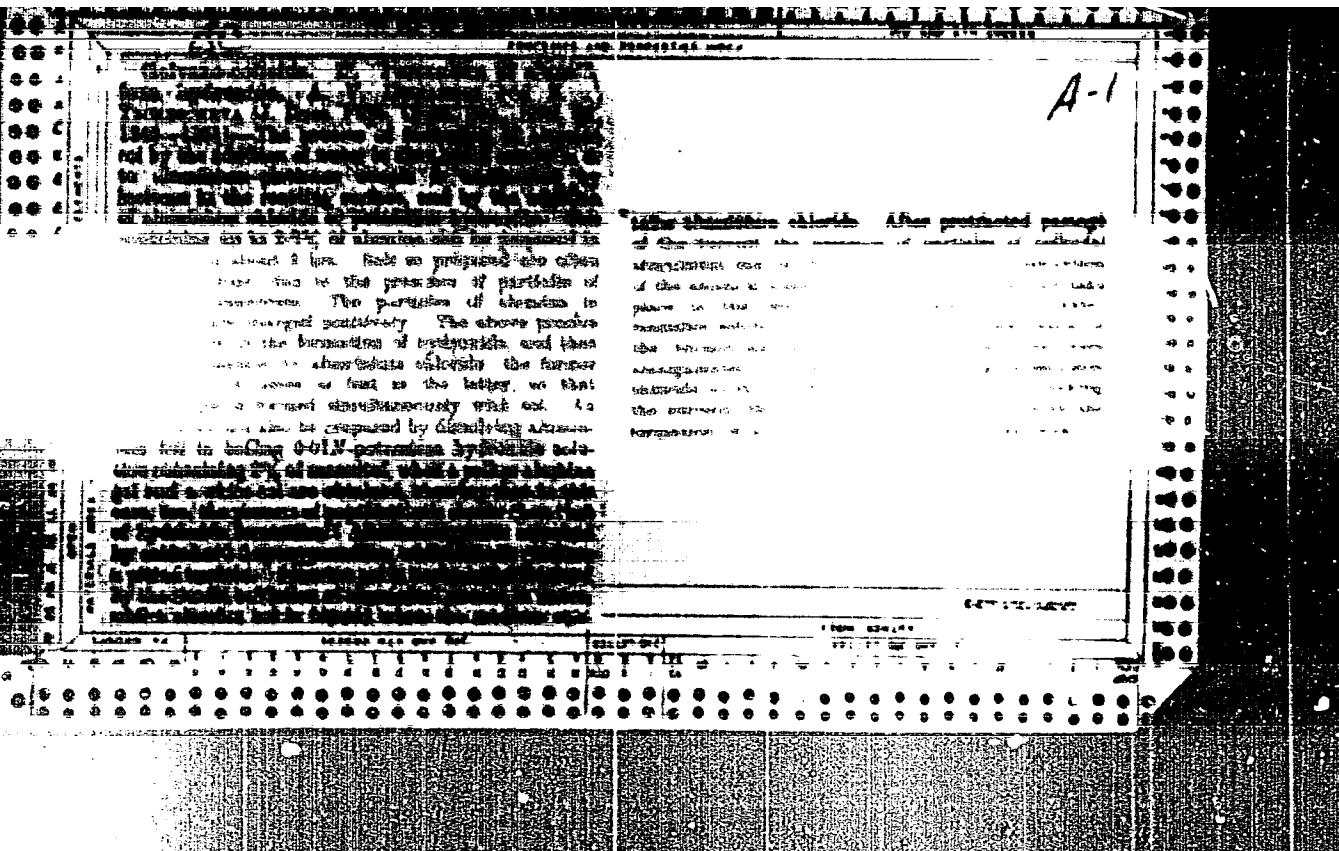


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1980, Cr. 1920-1980.  
The author has observed however's observation  
of A. J. H. M. K. 1973 that P.D. is set up between  
two plates of glass and copper when these  
are immersed in solution in which same reaction  
is proceeding as with the study of the forma-  
tion of double layer to give the P.D. disappears  
with the disappearance of double layer from solution  
and the appearance of anions solution.  
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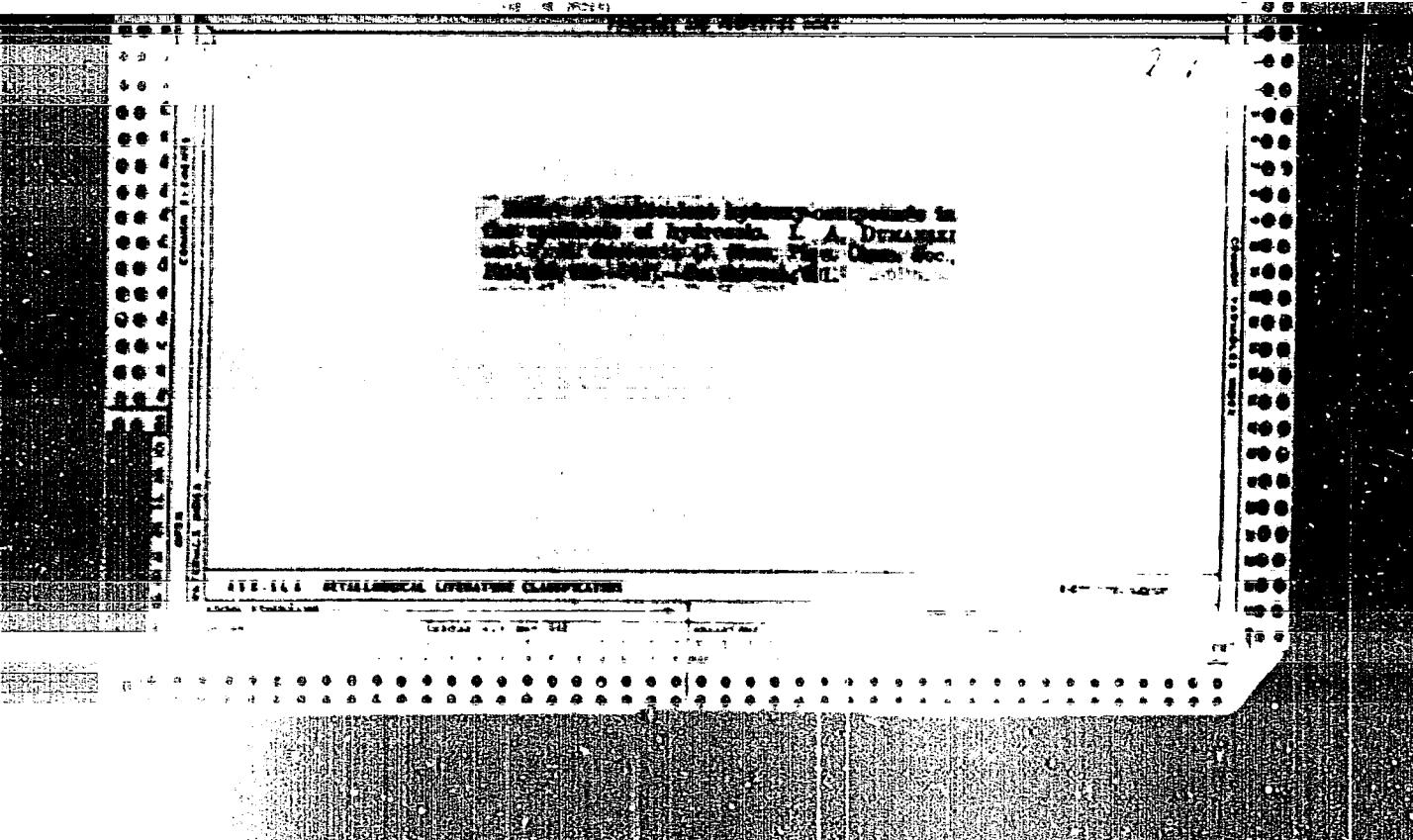
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ca  
Study of the kinetics of coagulation of colloids by the aid of a photoseismometer. A. V. Dement'ev and P. A. Sazanov. *J. Russ. Phys.-Chem. Soc.* 62, 187 (1930).  
The curves connecting opacity with time for Au<sup>+</sup> ends after the addition of  $\text{BaCl}_2$  and for  $\text{Fe}(\text{OH})_3$  ends after the addition of  $\text{K}_2\text{SO}_4$ , at first rise, and then fall, with the commencement of flocculation. The expression  $\nu = \nu_0 e^{-\alpha t}$  is obtained, in which  $\nu$  is the time after addition of the coagulating electrolyte,  $\nu_0$  is the no. of cc. of the latter added, and  $\alpha$  and  $\nu_0$  are constants for a given system.  
B. C. A. 2

protective properties of sols prepared by the tartaric acid method. A. V. DURAN-  
NEGO AND B. S. PREMELOVSKY. *J. Russ. Phys.-Chem. Soc.* 62, 469-50 (1925). —The  
protective effect of stannous hydroxide, citric acid and titanous hydroxide sols, prep'd.  
by the tartaric acid method, on gold sols diminishes with increasing dilution and with  
aging of the protective sol. Purple sols are obtained by the addn. of Ti to gold sols;  
these sols are coagulated by the addn. of NaCl, but the coagulum can readily be re-  
disolved in water. Stannous hydroxide forms an adsorption complex with colloidal  
gold, which can be precip. as a bluish black coagulum by the addn. of NaCl; this ppt.  
can be redissolved in water with the production of a red sol. B. C. A.

"APPROVED FOR RELEASE: Thursday, July 27, 2000 CIA-RDP86-00513R00041152



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Preparation and properties of cobalt-catalyzed systems of hydrides. II. A. V. DUDAROV and N. G. KURUMOV (J. Russ. Phys. Chem. Soc. 1890, vol. 16, p. 162).—The binary systems  $N$ -cobaltous chloride or nitrochloride nitrate-N-ardine-tartate or  $\text{O}_2\text{O}'$ -nitrophenoxide sodium hydride have been examined for gel and sol formation, and the results are presented graphically in a three-dimensional system. Cobaltous hydroxide aduran is more acidic (higher than does cobaltous hydride), but less volatile (more stable).

A. Tsvetkov.

## 614-616 INTELLIGENCE LITERATURE CLASSIFICATION

CODES AND CATEGORIES  
CLASSIFICATION  
REF ID: 614-616

✓ Galvanic colloids. III. Preparation of ferric oxide sol. A. J. MARSHALL AND  
Z. P. CINCAROVÁ. *J. Russ. Phys.-Chem. Soc.* 62, 1131 (1930) — Electrolysis of  $N$   
 $FeCl_3$  with an iron anode and Pt cathode yields dispersions of, usually,  $FeO$ . When  
an alk. soln. of ammonia is electrolyzed,  $Fe$  does not disperse. If Hg is used as the  
cathode, electrolysis of  $FeCl_3$  yields a sol. ammonia from which black rods can be  
obtained by shaking with an alk. soln. of ammonia. More concentrated ammonia (1-3%  $Fe$ )  
was prep'd according to Wieland and Preutz (C. A. 25, 6918); 50 g. of this emulsion  
was shaken with 200 ml.  $N$  KOH contg. 4 g. ammonia. The resulting suspension of  
hydrated  $FeO$  undergo gradual oxidation.  $Fe_2O_3$  remaining in suspended condition and  
 $Fe(OH)_3$  eventually settling out. The addition of a few drops of  $H_2O_2$  converts the  $FeO$  into  
the magnetic oxide, which also settles out. The dissolved rods contain 0.7-0.8 g.  $Fe$  per l.  
The sp. cond. ranges between  $6 \times 10^4$  and  $6 \times 10^5$  mhos. The particles carry a  
neg. charge. B. SOVINKOVY

DANINSKY, A. V., and YAKOVLEV, A. G.

"Polyatomic Acid Compound during the Synthesis of Electronegative Sol's, 5.  
Oxy-Acid," ZHUKO, 62, 1665, 1930; Bull. Soc.Chim., 47, 1211, 1930.

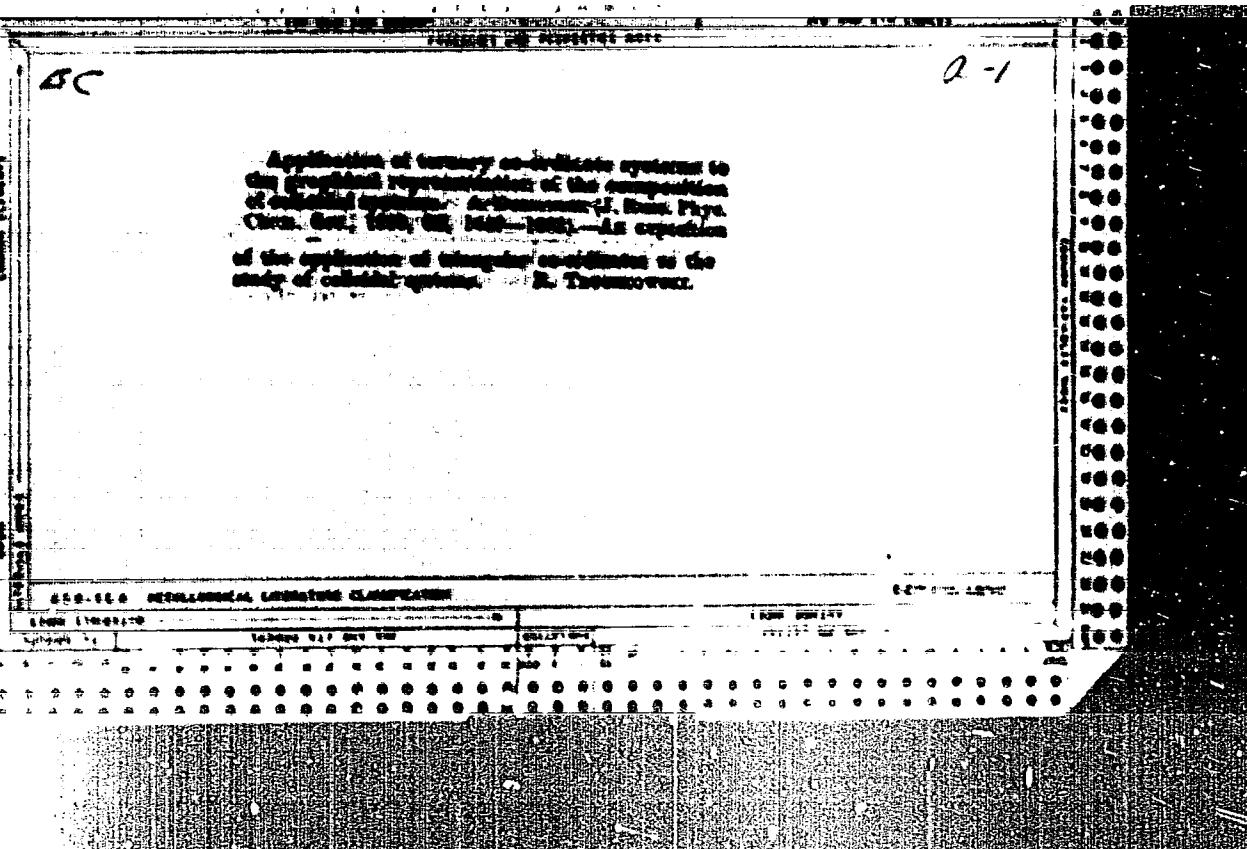
The action of polyhydroxy compounds in the synthesis of hydroxyl IV. Sugars  
A. V. LOKATEKHEM AND L. G. KRAVETTA. *J. Russ. Phys.-Chem. Soc.* 62, 1713-21 (1900)  
*Kolloid-Z.* 54, 75-91 (1931); cf. C. A. 24, 3028. — The results of the systems: NaOH-FeCl<sub>3</sub>  
sugars are effectively represented by the triangle plot. The order for decreasing effectiveness  
of precipitation is lactose, levulose, sucrose, galactose, glucose, maltose and raffinose.  
Anton PLUMMER

AMERICAN METALLURGICAL LITERATURE CLASSIFICATION

CH 2  
Polyhydroxy compounds in cellulose synthesis. III. Formation of iron hydroxide gel in the presence of citric acid. A. V. DUMADEV AND T. P. TYAZENLOVA. *J. Russ. Phys. Chem. Soc.*, 62, 1933, 24 (1920); *Bull. soc. chim.*, 49, 132 (1931), cf. C. A. 24, 6077. The system  $\text{FeCl}_3\text{-Na citrate-NaOH}$  (1 M molar of the components being added) is represented by a triangle. If one draws a bisectrix from the Na citrate vertex, the zone of true salts extends along the  $\text{Na citrate-FeCl}_3$  side, the sides being green or orange in color. Red-brown salts are formed in the wide region reaching from this zone a little beyond the bisectrix. A narrow strip running nearly parallel to the bisectrix represents unstable salts. Along the  $\text{Na citrate-NaOH}$  side and from the NaOH vertex to the base of the triangle, precipitation occurs. The salts and gels were further studied; conductometric and electrometric (method of unequal electrodes, cf. C. I. 24, 2236) titrations were made of  $\text{FeCl}_3$  salts with Na citrate, and of their mixt. with NaOH.  $\text{FeCl}_3$  and Na citrate react in the mol. ratio of 1:1.32 to form the com-

ples  $[\text{Fe}(\text{C}_6\text{H}_5\text{O}_7)_2]\text{Na}_2\text{O}_6$ . A comparison of the erythrocytic curves of  $(\text{FeCl}_3 + \text{Na citrate} + \text{H}_2\text{O})$ ,  $(\text{Na citrate} + \text{H}_2\text{O})$ ,  $(\text{FeCl}_3 + \text{H}_2\text{O})$  and  $(\text{NaCl} + \text{H}_2\text{O})$  confirms the above conclusions. Hydrolysis of the complex yields the colloidal micelle which is neg. charged. The salts are unstable; if NaOH is present in acid, in excess of that equiv. to  $\text{FeCl}_3$ , precipitation occurs; if  $\text{FeCl}_3$  is present in excess, the micelle is transformed by light into the complex salt. These changes are readily followed by means of spectrophotometric measurements.

APPENDIX METALLURGICAL LITERATURE CLASSIFICATION



CA

Polyoxotitanate oxygen compounds in the synthesis of electro-negative salts. VI.  
A. V. D'yachenko and T. A. GRANOVSKAYA. *J. Russ. Phys.-Chem. Soc.*, 62, 1879-92  
(1930). - In studying the mechanism of formation of colloidal particles of  $\text{PtO(OH)}_4$   
( $\text{H}_2\text{PtCl}_6$ ) in the presence of ammonium it was found that the col does not appear on the surface  
but at a rate of  $\text{Pt}^{2+}$  and  $\text{Na}^{+}\text{OH}^-$ . It is assumed that this is due to formation of a  
stabilizer, a protective coating of the adverb, in this case of  $\text{H}_2\text{PtCl}_6$ , i.e.,  $\text{PtO(OH)}_4$  col is  
hydrophilic. To support this assumption the col is compared with hydroxides that are  
known to be hydrophobic or hydrophilic by plotting the coagulation fields of the various  
cols in a mixed solvent  $\text{H}_2\text{O}-\text{C}_6\text{H}_5\text{OH}-\text{C}_2\text{H}_5\text{OH}$ . The plot for  $\text{PtO(OH)}_4$  resembles those  
for hydrophilic salts.

S. L. Moshensky

ASA-LLA METALLURGICAL LITERATURE CLASSIFICATION

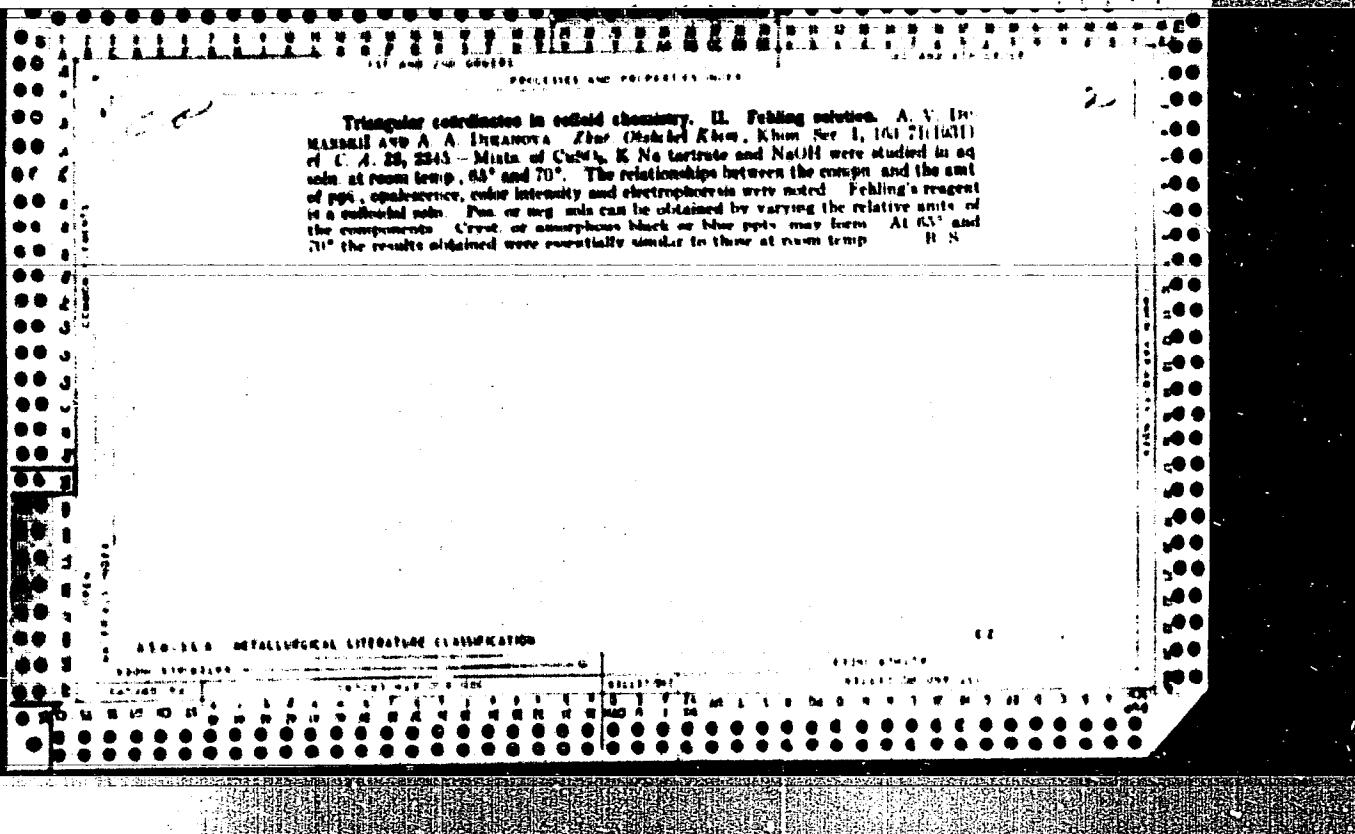
PERCENTAGE AND PROTECTIVE ACTION

2.

Polymeric oxygen derivatives in the synthesis of electronegative salts. VII.  
Formation of the hydroxyl  $\text{Fe(OH)}_3$  in the presence of polymeric carbohydrate. A. V. Dostanets and B. S. Ponomarenko. *J. Russ. Phys. Chem. Soc.* 63, 2249-50 (1920); cf. C. A. 15, 2000.—In studying the peptizing effect of polymeric carbohydrates on  $\text{Fe(OH)}_3$ , triangular diagrams were constructed on the basis of 3 constituents:  $\text{FeCl}_3$ ,  $\text{NaOH}$  or  $\text{NH}_4\text{OH}$  and a carbohydrate, such as dextrin, col. starch, insulin and gum arabic. Areas of formation of ppts. of salts were mapped on these diagrams. The polymeric carbohydrates serve in salt. salts. as peptizers by forming electroneg. hydroxols. The peptizing diagrams particularly of dextrin and insulin resemble to some extent those of sugars. Insulin is a better peptizer than dextrin. The diagrams for starch and gum arabic are distinguished by having the ppts. fields overlap into the electroneg. part, which indicates their sensitizing action. Gum arabic is more sensitizing than col. starch. The formation of a diffusely settling turbidity is due to the protective property of the peptide. Gum arabic has a greater protective action than col. starch and its diagrams show a large field of diffusely settling turbidity. The peptizing action of the carbohydrates is inversely proportional to the concn. of salts. In the presence of polymeric carbohydrates  $\text{NaOH}$  and  $\text{NH}_4\text{OH}$  are peptizers for electroneg. salts, and  $\text{NaOH}$  is a stronger peptizer than  $\text{NH}_4\text{OH}$ . R. L. M.

Polymers have been made by methods described in the literature of electrocapillary hydrolysis. V. M. Kostylevskaya, A. D. Olsuf'ev, and A. G. Zaitsevsky [Zhur. Neorg. Khim., 17, 1311-1313, 1982; and J. Russ. Phys. Chem. Soc., 18, 1051-1070, 1896] used aqueous solutions of  $\text{LiClO}_4$  in the presence of  $\text{HgCl}_2$  to polymerize vinyl chloride. Gold (III) has been oxidized using the Cope method of trifluoroacetylation. The authors have given the value of the regions of stability of the cation and anion radicals. P. L. Kostylevskaya, A. D. Olsuf'ev, and V. M. Kostylevskaya [Zhur. Neorg. Khim., 17, 1311-1313, 1982] have shown that the order of polymerization of vinyl chloride is 1.0. The authors have shown that the polymerization rate is greater than the diffusion rate. J. R. T. Harrover.

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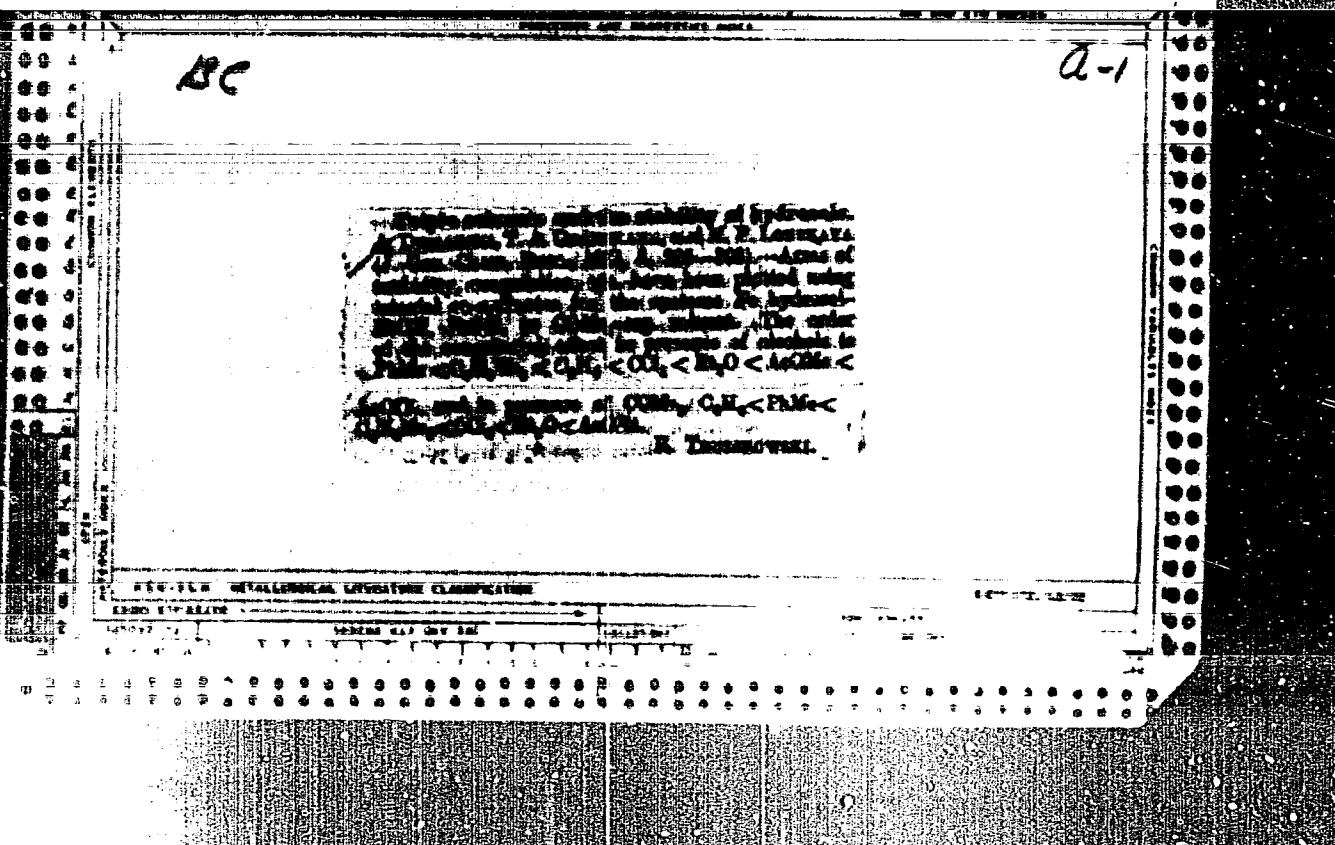


CA

The method of the triangular system of coordinates in colloid chemistry. III. Precipitation of ferric hydroxide by alkaline solutions of manganese. A. DUMASSEUL AND V. M. KATKOVICH. *J. Gen. Chem. (U. S. S. R.)*, 20-18(1951), cf. *Z. A.* 23, 2345.— To a suspension of  $\text{Fe(OH)}_3$  (contg. about 0.12 g. Fe(OH)<sub>3</sub> per l) were added water, 0.2 M manganese and 0.8 N NaOH, so that the total vol. of the mixt. was the same as a given series of expts. The mixt. was first centrifuged, and the Fe content of the supernatant liquid dried. "Isoprecip. lines" (lines of equal wt. of Fe(OH)<sub>3</sub>) were plotted on two triangular diagrams: [M]—manganese-NaOH and  $\text{Fe(OH)}_3$  (A)—manganese (B)—NaOH (C). On the second diagram, the zone of complete precipitation extends from C to about the middle of CA, and from there to a point on CB that is about twice as distant from C as from B. At, along the boundary line of this zone twice as much NaOH soln. is required as manganese. Inside the zone, the relative amounts of the precipitates are not important. When a longer time (8 days) is allowed for the precipitation, the excess of NaOH has a greater effect on the amt. of dispersed  $\text{Fe(OH)}_3$ . The increased precipitation following an increase in soly. is of special interest since, as it will be shown in subsequent communications,  $\text{CaCu}_6$  is also peptized by hydroxy compds. Soln. formation and desolvification may thus be governed by the  $\mu_{\text{H}}$  of hydroxide. IV. Precipitation of ferric hydroxide by sodium tartrate in alkaline solution. A. DUMASSEUL AND Z. P. CASSINOVÁ. *Z. f. Z.* 223-6.—The system  $\text{Fe(OH)}_3$  eq. Na tartrate eq. NaOH was studied in the same manner. The isoprecip. lines converge toward the Na tartrate vertex; hence max. precipitation occurs in the presence of small amounts of alkali and relatively large amounts of Na tartrate. Large amounts of sediment increase the soly. in the presence of excess Na tartrate and decrease the soly. when only small amounts of the

peptides are available. The top. influence of Na tartrate and NaOH is illustrated by "low-tartrate" and "high." Since True color result when an excess of the tartrate is present. V. The systems sugar-calcium carbonate-codium hydroxide. A. DURAN-MAT AND O. R. VENKATESWARA. /bid 62D-4. - Suspensions of powdered chalk in alt. solns of sucrose settle out more slowly in a sedimentometer and contain finer particles than similar suspensions in NaOH soln. or sugar soln. The particles are positively charged, probably because of the ionization of the surface-C's coupled formed in the surface layer. The charge of the particle corresponds to  $\text{Ca}(\text{C}_6\text{H}_{10}\text{O}_5)_2 + \text{OH}^-$ . The system eq. NaOH-aq. sucrose-CaCO<sub>3</sub> was studied by a procedure similar to that of previous investigations (cf. C. A. 38, 224). In systems obtained by adding a year-old eq. suspension of CaCO<sub>3</sub> to solns. of sugar and NaOH the stability increases with sugar concn. With const. sugar concn. the max. stability is at  $p\text{H}$  12.6-12.7. In suspensions of CaCO<sub>3</sub> obtained from CaCl<sub>2</sub> and Na<sub>2</sub>CO<sub>3</sub> in the presence of both sucrose and NaOH, above certain concns. of NaOH clear solns. were immediately obtained. Also, the relatively stable suspensions became clear on standing in closed vessels, and crystals of CaCO<sub>3</sub>.8H<sub>2</sub>O appeared. Mannitol in alt. soln. also peptizes CaCO<sub>3</sub> and produces crystals of the carbonate on standing. The formation of the hydrate accounts for the hydrophilic properties of CaCO<sub>3</sub> suspensions.

B. SAVAGE



DUMANSKIY, A. V., and VISHNEVSKAYA, G. R.

"Utilization of the Triangular System of Coordinates in colloidal Chemistry,  
5. Sugar methods ——  $\text{CaCO}_3\text{-NaOH}$ ," ZhOKh, 1, 620, 1931.

DISCUSSION AND DISCUSSIONS

Sensitization and stabilization of hydrophilic hydrosols. L. A. V. DEDARSKY AND N. BERNARDINO. *J. Col. Chem.* (U. S. A. R.) 1, 822 (1921).—Triangular co-ordinates were used to represent the compon. of mixts. of a gelatin sol with EtOH and a 1 N soln. of an electrolyte (cf. C. A. 23, 2345). Zones of pptn., gelation and turbidity were plotted on the resulting triangles. Note that yld acid acts as a hydrolytic (AlCl<sub>3</sub> and NaCl) stabilizer against toward EtOH. NaCl and NaHPO<sub>4</sub> sensitizes it to a greater extent than NaCl. Agar-sol was sensitized toward EtOH by NaCl, AlCl<sub>3</sub>, CuCl<sub>2</sub> and NaCl; NaCl and NaHPO<sub>4</sub> acted as stabilizers. [L. A. V. DEDARSKY AND S. F. KRAHN. *Jad* 887-42.—Agar sol, water and an electrolyte soln. were mixed in varying proportions, the total vol being kept const. The electrolytes

were 0.3 N HCl, 0.18 N Na<sub>2</sub>SO<sub>4</sub>, 0.025 N BaCl<sub>2</sub>, 0.0005 N CuCl<sub>2</sub>, 0.0001 N AlCl<sub>3</sub> and 0.0008 N NaCl. A second series of mixts. was prep'd. in which EtOH replaced the super-added water. The extent and location of the pptn. zones were compared by super-imposing the first set of the triangular diagrams on the second. EtOH sensitizes the sol toward NaCl. Large excesses of EtOH relative to those of NaCl sensitizes the sol with the excess ratio reversed. EtOH has a protective action. With CuCl<sub>2</sub> and NaCl as the electrolytes, EtOH acts as a protector over most of the concn. range, although small amounts of EtOH possibly sensitizes the sol. A very weak stabilizing effect of EtOH is noted in the presence of AlCl<sub>3</sub>. A similar study of Graham's FeCl<sub>3</sub> sol was made, and is noted in the presence of AlCl<sub>3</sub>, 0.025 N NaCl, 0.025 N CuCl<sub>2</sub>, 1.5 N AlCl<sub>3</sub>, 0.0005 N Na<sub>2</sub>SO<sub>4</sub> and 0.0016 N NaHPO<sub>4</sub>. EtOH sensitized the sol toward NaCl, BaCl<sub>2</sub>, AlCl<sub>3</sub> and CuCl<sub>2</sub>. The concn. zone within which sensitization occurs was smaller with Na<sub>2</sub>SO<sub>4</sub> and still smaller with NaHPO<sub>4</sub> as the electrolyte. The sensitizing effect of EtOH therefore decreases with the increasing valence of the pptg. ion. Previous investigators did not agree regarding the effect of EtOH on sulfid stability because their studies were confined to different concn. ranges. R. Sovanovic

65-114 METALLURGICAL LITERATURE CLASSIFICATION

**Physicochemical analysis of catena systems.** The peptization of ferric hydroxide by solutions of ferric chlorides. A. DURAKOWSKI and V. M. SAVCHENKO. *J. Russ. Chem. Soc.* (U. S. S. R.) 1, 1229-44 (1951); *cf.* *C. A.* 43, 2807. — The peptization of  $\text{Fe}(\text{OH})_3$  by  $\text{FeCl}_3$  solutions is a two-step process (the connecting compound at which the same amt. of  $\text{Fe}(\text{OH})_3$  remained in stable suspension) were plotted on the triangular diagram  $\text{Fe}(\text{OH})_3$ - $\text{FeCl}_3$ - $\text{H}_2\text{O}$ . Very large and very small amounts of  $\text{FeCl}_3$  decrease peptization. The isopeptile lines begin and end at the  $\text{Fe}(\text{OH})_3$ - $\text{FeCl}_3$  side. In the previous experiments with mixtures of salts as precipitants the isopeptile lines were closed circles. The addition of  $\text{NaCl}$  causes a continuous decrease in precipitation by  $\text{FeCl}_3$ . Similar studies were made of the system  $\text{Fe}(\text{OH})_3$ - $\text{FeCl}_3$ -electrolyte-soln. The alkali chlorides prevented precipitation; the restraining effect increased in the series  $\text{K} < \text{Na} < \text{Li}$ . A similar increase occurred in the series  $\text{Ba} < \text{Sr} < \text{Ca} < \text{Mg}$ . The coagulating power of alkali and alk. earth chlorides thus depends on the hydration of the cation. The system  $\text{Fe}(\text{OH})_3$ - $\text{FeCl}_3$ - $\text{HCl}$ -soln. is discussed on the type. The isopeptile lines are shifted toward the  $\text{Fe}(\text{OH})_3$ - $\text{FeCl}_3$  side. The lines of small  $\text{FeCl}_3$  content are S-shaped. Small amounts of  $\text{Fe}(\text{OH})_3$  in contact with large amounts of  $\text{LiCl}$  absorb  $\text{FeCl}_3$  from the soln. although no precipitation occurs. Hence the total amt. of  $\text{Fe}^3+$  in the supernatant liquid decreases, — an effect termed by us "neg. peptization."  $\text{AlCl}_3$ , although itself a peptizer of  $\text{Fe}(\text{OH})_3$ , hindered the peptization by  $\text{FeCl}_3$ . Wherever neg. peptization occurred, washing the residue free from the electrolyte ( $\text{AlCl}_3$  or  $\text{LiCl}$ ) caused it to disperse. Hence the particles of  $\text{Fe}(\text{OH})_3$  in such mixts. acquire, by adsorbing  $\text{FeCl}_3$ , an "anionic complex," whose ionization is prevented by  $\text{AlCl}_3$  or  $\text{LiCl}$ , resp. The soln. obtained in the presence of  $\text{AlCl}_3$  aged rapidly. The peptizing action of various cations (used also their Na salts), when added to  $\text{Fe}(\text{OH})_3$ - $\text{FeCl}_3$  mixts., is in the order  $\text{NO}_3^- > \text{Cl}^- > \text{Br}^- > \text{SO}_4^{2-}$ . Of these, the  $\text{NO}_3^-$  ion aids peptization, while the remainder exert a hindering effect. The sulfate is a particularly strong antipeptizer in small concns. When present in large concns., peptization occurs readily, but the resulting sols. are colored yellow; the isopeptile curves are closed, as in a complete polymer.

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2A  
Luminescence in electrolyte. A. V. Dzherzhinskii, A. V. Banov and M. V. Litvinov. *J. Phys. Chem.* (U. S. S. R.) 2, 103-117 (1941).—Approx. 30 substances giving luminescence are listed and the conditions and colors of light given. C. d. was approx. 0.01 amp./sq. cm. and the c. m. 1. 10 v. Y. H. Rathmann

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